

Claims

1. A hand-guided power jigsaw (10) with a jigsaw blade (33) which can be detachably clamped between the ends of two essentially parallel arms (221, 222) preferably comprised of a U-shaped frame (22), in particular comprised of a tube, and which can be driven, in particular in a reciprocating manner, by a motor (11) integrated into the jigsaw (10), wherein a protruding handle (13), preferably with a switch button (15) of an on/off switch, is disposed on one of the arms (221, 222), characterized in that the lower arm (221) carries the motor (11) and transmission mechanism (114, 115, 116, 119, 67) for moving the saw blade (33) back and forth, particularly in a base housing (12), wherein a crankshaft (116) coupled to the motor (11), in particular by means of a connecting rod (67), engages an elastic support (51, 57) in order to secure the jigsaw blade (33), in particular in a detachable fashion.

2. The jigsaw according to claim 1, characterized in that the motor (11) is a direct current motor which has a separate motor housing (110) that encapsulates a rotor with a motor shaft (1103), its bearings, and a stator comprised of permanent magnets, and which can be connected to a mains voltage source, in particular via an electronic rectifier.

3. The jigsaw according to claim 2, characterized in that the motor (11) can be elastically supported in the base housing (12) by means of rubber rings (112).

4. The jigsaw according to claim 1, characterized in that the crankshaft (116) is supported in the base housing (12) and on

a free end, supports a crank pin (119) which can be coupled in a positively engaging manner to the connecting rod (67).

5. The jigsaw according to claim 1, characterized in that with its free end (57), a leaf spring (51) supported by the lower arm (221) serves as a support (57) for the saw blade (33) and this support (57) can be pivoted up and down and guides the saw blade (33) in a parallelogram-like fashion, wherein the connecting rod (67) coupled to the leaf spring (51) is only subjected to tension.

6. The jigsaw according to claim 5, characterized in that the connecting rod (67) is supported in rotary fashion on the crank pin (119) with a connecting rod eye (680), in particular by means of a needle bearing (1100).

7. The jigsaw according to claim 1, characterized in that on its free end, in particular in an end housing (24), the upper arm (222) supports a leaf spring (50), which serves as an upper support (56) for securing the other end (34) of the jigsaw blade (33), wherein a parallelogram-like transmission is formed, with the saw blade (33) acting as a coupling and with the supports (56, 57) acting as rockers.

8. The jigsaw according to claim 7, characterized in that the end housing (24) has clamping means (25) for detachably securing the saw blade (33).

9. The jigsaw according to claim 7, characterized in that the upper leaf spring (50) is bent into a U-shape and has two legs (501, 502), one of which is fastened, in particular riveted, to the free end (53) of the upper arm (222), wherein at least one

of the legs (501, 502) points outward in the same direction as the arm (222).

10. The jigsaw according to claims 5 and 7, characterized in that the ends (56, 57) of the leaf springs (50, 51) that serve as supports have a slot (58), preferably in the center, in which a clamping end (34) of the jigsaw blade (33) can be detachably suspended, wherein the jigsaw blade (33) can be guided up and down in a parallelogram-like fashion on the fork ends (56, 57) of the leaf springs (50, 51).

11. The jigsaw according to one of the preceding claims, characterized in that at their free ends, the leaf springs (50, 51) each have a channel (61) extending lateral to the slot (58) and a clamping end of the saw blade (33) embodied as a nipple (34) can be supported, in particular with a prismatic sharp edge (61), in an automatically centered way in this channel (61), forming an articulating joint.

12. The jigsaw according to claim 11, characterized in that on its free end (57), the lower leaf spring (51) has a loop (64) that curves downward and is particularly produced by stamping, which constitutes an eyelet (65) for the engagement of the connecting rod (67), in particular with an end embodied as a hook (671).

13. The jigsaw according to claim 1, characterized in that the base housing (12) is embodied in the form of a pistol and has a handle (13) that protrudes down and back at an oblique angle, whose rear contour forms a curved and angled throat (14), which in the operating position, fits vertically into the user's hand and is grasped there both horizontally and vertically, wherein

the lower arm (221) of the U-shaped frame (22) emerges from the rear of the housing (12), curves upward in an arc-shape, and transitions toward the front into the second arm (222).

14. The jigsaw according to claim 13, characterized in that the base housing (12) adjoining the handle (13) extends back and serves as a forearm support.

15. The jigsaw according to one of the preceding claims, characterized in that the jigsaw blade (33) has two clamping ends which are provided with thickened parts, particularly in the form of nipples (34) which are secured in a fork slot (58) on the supports (56, 57) of the leaf springs (50, 51).